muil

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 2/5/5/75/5Source: 2/7/5/75/5Date Processed by STIC: 2/7/5/5/5/5

ENTERED



Input Set: D:\00358JHU.SEQ SEQUENCE LISTING.TXT Output Set: N:\CRF4\01212005\J518751.raw

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4 <110> APPLICANT: St. Croix, Brad
             Kinzler, Kenneth W.
             Vogelstein, Bert
      8 <120> TITLE OF INVENTION: MEMBRANE ASSOCIATED TUMOR ENDOTHELIUM
             MARKERS
    11 <130> FILE REFERENCE: 001107.00358
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/518,751
C--> 13 <141> CURRENT FILING DATE: 2004-12-21
    13 <150> PRIOR APPLICATION NUMBER: 60/390,187
    14 <151> PRIOR FILING DATE: 2002-06-21
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    18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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Input Set : D:\00358JHU.SEQ SEQUENCE LISTING.TXT

Output Set: N:\CRF4\01212005\J518751.raw

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55 ttttaaattc aagaaaaatt gtgtttatct ttagaatttt gtattcaata ctttatgtac
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69 Glu Leu Gly Glu Ile Asn Tyr Phe Asn Phe Phe Ile Leu Tyr Lys
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          35
                              40
71 Ala Met Asp Phe Ile Trp Leu Met Cys Ala Leu Tyr Thr Ser His Phe
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99 coggaagate atetteteet acgtggtggt etteettgte tgetggetge cetaceaegt
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Input Set : D:\00358JHU.SEQ SEQUENCE LISTING.TXT
Output Set: N:\CRF4\01212005\J518751.raw

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111	agttaaatat	attttaaa	ta ttgtt	tggga	a ggo	catag	gtgc	tgad	atat	at t	caga	agtgtt	1680
112	gtagttttaa	ggttagcg	tg actto	agtti	t tga	actaa	agga	tgad	cacta	at t	gtta	agctgt	1740
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114	aatgttttat ttaccatagt tttatatctg tgtggtgttt tgtaccggca cgggatatgg									1860			
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132	Phe Ile Tyr	Ile Phe	Ile Phe	e Val	Ile	Gly	Met	Ile	Ala	Asn	$\operatorname{\mathtt{Ser}}$	V al	
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136	Cys Tyr Ile	Leu Asn	Leu Ala	a Ile	Ala	Asp	Leu	Trp	Val	Val	Leu	Thr	
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146	Arg Arg Val	Val Cys	Ile Le	ı Val	Trp	Leu	Leu	Ala	Phe	Cys	Val	Ser	
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Input Set : D:\00358JHU.SEQ SEQUENCE LISTING.TXT

Output Set: N:\CRF4\01212005\J518751.raw

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162 Leu Glu His Ala Leu Phe Thr Ala Leu His Val Thr Gln Cys Leu Ser
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        290
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164 Leu Val His Cys Cys Val Asn Pro Val Leu Tyr Ser Phe Ile Asn Arg
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166 Asn Tyr Arg Tyr Glu Leu Met Lys Ala Phe Ile Phe Lys Tyr Ser Ala
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Input Set : D:\00358JHU.SEQ SEQUENCE LISTING.TXT

Output Set: N:\CRF4\01212005\J518751.raw

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/518,751

DATE: 01/21/2005 TIME: 17:28:32

Input Set : D:\00358JHU.SEQ SEQUENCE LISTING.TXT

Output Set: N:\CRF4\01212005\J518751.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: MEMBRANE ASSOCIATED TUMOR ENDOTHELIUM MARKERS

(57) Abstract: To gain a better understanding of tumor angiogenesis endothelial cells (Ecs) were isolated and gene expression patterns were evaluated. When transcripts from Ecs derived from normal and malignant colorectal tissues were compared with transcripts from non-endothelial cells, over 170 genes predominantly expressed in the endothelium were identified. Comparison between normal-and tumor-derived endothelium revealed differentially expressed genes, including many that were specifically elevated in tumor-associated endothelium. Experiments with representative genes from this group demonstrated that most were similarly expressed in the endothelium of primary lung, breast, brain, and pancreatic cancers as well as in metastatic lesions of the liver. These results demonstrate that neoplastic and normal endothelium in humans are distinct at the molecular level.